Abstract

A solution temperature control device in a biological cell observing chamber (30) used for the detection of chemotaxis and chemotactic cell separator, comprising a first temperature controller (62) and a second temperature controller (63). The first temperature controller (62) measures the temperature of a solution filled in a pair of wells and a flow passage in the chamber and controls the temperature to a specified temperature, and the second temperature controller (63) measures the temperature of a heating part (64) which heats the chamber (30) from the outside to indirectly heat the solution filled in the pair of wells and the flow passage and controls the temperature to a specified preheat temperature. Since the state and quantity of cells moving from one well to the other through the flow passage while holding the temperature of the solution at a specified temperature can be accurately observed and measured, accuracy for controlling the temperature of the solution can be remarkably increased.